1: Garnett B-4, 5 (ca. 1880) 1891
MA11 Kurd MA11

consumption, all of which are stored in the capacious jars.[1]

At Sulîemanieh, the Kûrdish capital, the better sort of houses are square, one-storied buildings, standing on a basement about three feet high, and built of sun-dried bricks with a plastering of mud mixed with chopped straw. The interiors of the principal rooms are lime-washed, and the flat roofs are formed of rafters covered with reeds and a coating of earth. Round the house is a walled enclosure, divided into two courts by a cross-wall, which joins the house at each end near its centre, leaving the front, which is the *selamlik*, in one court, and the back, the *kerrushk*, in the other. The gardens consist in great part of turfy lawns shaded by willows, poplars, and mulberry trees, which, with rose-bushes, are disposed in little clumps, and watered by a stream which has its source in the mountains. The chief apartment is the *talar*, a room quite open to the air in front, and used in warm weather as a general sitting and sleeping room by the family. Only the poorest persons sleep on the roofs of their houses. Some, in the greatest heats, which last only a month, sleep in *tchardaks*, or bowers, over the tanks in the courts, or in tents, to escape from the fleas, which are said to be even more formidable here than in the rest of Turkey. In the *selamlik* is also a large spacious hall, dimly lighted, and used as a cool retreat in summer. The winter rooms are approached by a long, dark passage.

[1] Xenophon, in his '*Anabasis*', or *Retreat of the Ten Thousand*, mentions that the Kurdoci kept their wine in cemented cisterns, bk. iv. chap. ii.

The employment of masons and builders is not solely confined to the town of Rowanduz, for specialists of this type are often called out to neighboring villages to supervise the constructions of wealthier people. The "mason" is not only expected to exercise his own craft, but must also fill the posts of architect, contractor, and general foreman. Having obtained the land, those who desire to build hold a consultation with the mason, reaching a verbal contract in which the materials, the amount of time necessary for completion, and the price are stipulated. The mason must then purchase the materials, arrange for their transportation, hire, insofar as it is necessary, the requisite labor, supervise the construction, and do the most difficult tasks, for example, the actual laying of bricks, himself. Builders of this type do not belong to guild or union, but seem to maintain themselves within the strength of their families. A building operation is apt to involve a number of sons, brothers, and nephews, with the mason as a sort of congenial taskmaster and guiding spirit, who alternately pleads and jests with his workers. The operation can suffer from general lassitude, and the owner must at last have words with the builders. Most houses appear to reach completion by means of a series of such arguments. Constructing a larger house in Rowanduz is a relatively expensive undertaking. Two houses and their land, located in the higher-priced lower portion of town, cost the mukhtar, Ra'uf Effendi, about 1500 dinars. The lots accounted for half the price, and the average cost of

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each house was thus in the neighborhood of 375 dinars (almost a thousand American dollars). With such capital as this involved, building is a serious business and litigations between owner and mason appear frequently before the judge. Poorer townspeople with a flair for the work sometimes build their own simple homes, but anything larger requires the specialist. In such smaller constructions Rowanduz seems to have little "communalism," for, while the neighbors may lend a hand, there is no tradition which requires the aid of others.

Some of the important details of house construction will be found in the succeeding section. There is one person in the town who devotes himself to the manufacture of mud-bricks and the supply of large pieces of uncut stone, these last used for threshholds, courtyards, steps, and the like. The moistened soil for bricks is mixed with chaff and moulded with a wooden form. The shaped bricks are laid out in rows in the sun to dry, and, when hardened, are ready for construction. No fire-burnt bricks are manufactured in the town. There is no special place for brick-making, and in 1951 an empty lot near the house of Isma'il Beg was used for this purpose. Similarly, there is no particular stone-quarry for the district, and any convenient outcrop may be used. The people of the district are not skilled in stoneworking, and most pieces, usually of limestone, are only crudely roughed into flat, irregular slabs. Mud-brick, because it is more easily

produced and cheaper, tends more and more to replace stone 339
in house building, despite the fact that thereby the life
of a house, particularly in a region of winter rain and
snow, is considerably shortened. Mud-brick has undoubtedly
been known in the region from antiquity, but its greatly
increased use in the construction of house walls is a
feature of the last half-century. Cement-blocks, which
have been cited in certain government structures, are im-
ported, and these buildings themselves are constructed
under the direction of government engineers. Some of the
chieftains in outlying villages have not missed the advan-
tages of building stone and concrete over mud-brick as
far as small arms fire is concerned, and one of them,
Mahmud Beg of the Baradost, was busy in erecting a large [712]
building which on completion will be almost the duplicate
of a fortified police post.

The carpenters of the town are occupied partially 335
in building and partially in the repair of furniture and 322
certain manufactures. Heavier pieces of timber are rare
in such a deforested area, and most of them, such as lintels,
are used again and again. Mud-roofs are laid down on a
thick layer of poles and twigs which are furnished by
village woodmen. Doorposts and doors are made of heavy,
roughly cut timber, and window-frames with glass must be
imported from Erbil. Furniture, benches and chairs, are [352]
used for generations, and the carpenters simply repair
them, rather than manufacture new items. Aside from this

4: Hansen E-5 (1957) 1961 MA11 Kurd MA11

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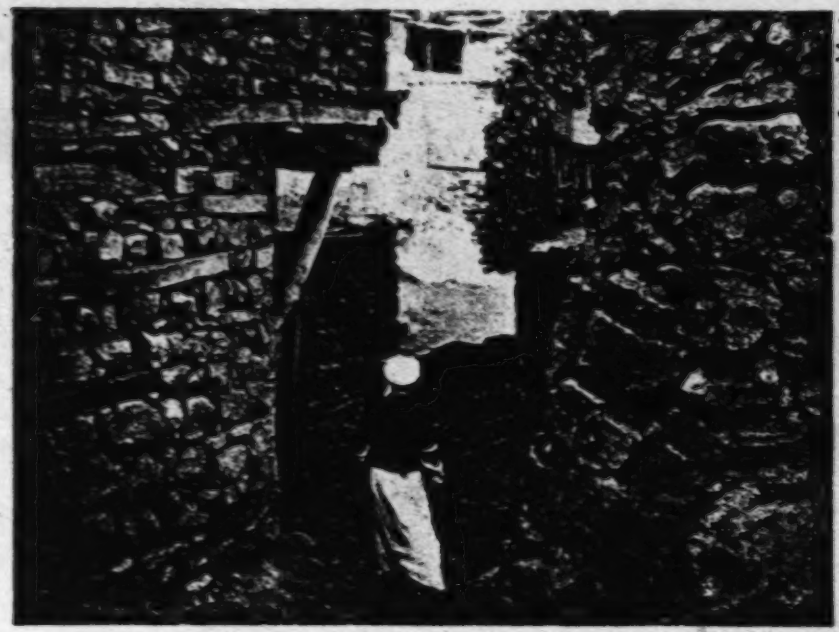

Fig. 16. Stone wall with inserted horizontal beams. Tawella.

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of this, with a kind of timber frame consisting of short, sleeper-like, wooden beams placed horizontally in the stone walls though not joined together. The stones in the wall have either no binding agent or clay is used as mortar. In the newest houses cement has been adopted. The interior walls in some of the rooms are covered by a clay or gypsum layer applied by the women, which is afterwards polished with flat stones[6]. It appears like a thick white oil paint. In villages and in the older houses in Sulaimani, on the other hand, the walls are made of mud bricks, *xiŝt*. The newer houses in Sulaimani are built of burnt brick. In the villages the bricks are first formed from the clay available on the building site, mixed with water and thoroughly kneaded by the feet of men. Water for the kneading process is obtained by directing an irrigation channel to the building site, or fetched in goatskins which are hung in pairs on the back of a donkey. Pebbles for the foundation, and for the rear wall if the house is built out of the side of a hill, are also transported by donkeys, being carried in basket-shaped frames. The kneaded mass of clay is formed into the individual brick in a rectangular wooden frame, in the same way as we form raw peat. The brick is put out on the hillside to dry for some days without much attention being paid as to whether the surface is really flat. After the foundation of the wall has been

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4: Hansen E-5 (1957) 1961 MA11 Kurd MA11

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Fig. 17. Housebuilding. Clay and water are kneaded with the feet. Pebbles for foundation are transported by donkey. Topzawa.

342 333 made of pebbles laid in a trench, a wall is put up composed of clay bricks, 1½ bricks thick. This is done with the help of an outstretched horizontal cord, but no spirit level or such like is used to assure that the wall is plumb, and the ground is not levelled. A mixture of clay and water is used as mortar. Whereas the men knead the clay and transport to the building site the water, stones and heavy poplar [462] trunks for the roofs, the women assist in the transportation of the dried clay bricks and the stacking of them. The window apertures can be rectangular and, like the door opening, bounded above by horizontal wooden sticks. Arched window openings, on the other hand, are formed by loosely and unsystematically stacking bricks in a vertical rectangular opening in the wall. These bricks are covered on top by a sack or such like on which bricks are placed in a semicircle. When the clay mortar holding the bricks together dries, the irregularly-stacked clay bricks and the sack are removed, whereby a window aperture, bounded above by a semicircle, results. Arched window openings can 342 be uncovered or covered by a lattice of flat wooden shavings, which allows in the light, but no stranger's gaze. This lattice is flush with the outside of the wall. The arched windows can also be fitted with wooden shutters which, when locked, are flush with the inside of the wall. Window frames

4: Hansen E-5 (1957) 1961 MA11 Kurd MA11

342 pairs, side by side, across the longitudinal axis of the house, at a distance of about 1 metre from each other. Across these are laid shorter sticks from one pair of rafters to the next. These sticks project about ½ metre over the outer walls like irregular eaves and protect the frail clay walls from the rains of winter. Above these longitudinal sticks a thick layer of brushwood is laid, but in less well-to-do homes this is replaced by ready-made mats rolled over the roof sticks. Above this again is placed a layer of leafy twigs, and on top of all comes the heavy pillow-shaped layer of clay which, like the walls, is plastered with a mixture of straw and clay[8]. After each shower this must be rolled to press out the water[9] and to make the roof watertight. A heavy, cylindrical, wooden roller is always ready on the roof. The thick layer of clay offers protection from the sun and the heat but not from the rain, *hêvan*. The door of the house is of wood, single or double, which pivots on a stone and is closed by a huge lock or an inside cross beam. At many places corrugated iron has replaced wood as material for doors, but it was stressed as particularly admirable that the houses in the village of Sargalu, which lies in a wooded district, are fitted with heavy wooden gates with wooden nails[10]. The heavy wooden doors

Fig. 19. Wall of mud bricks. Topzawa.

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4: Hansen E-5 (1957) 1961 MA11 Kurd MA11

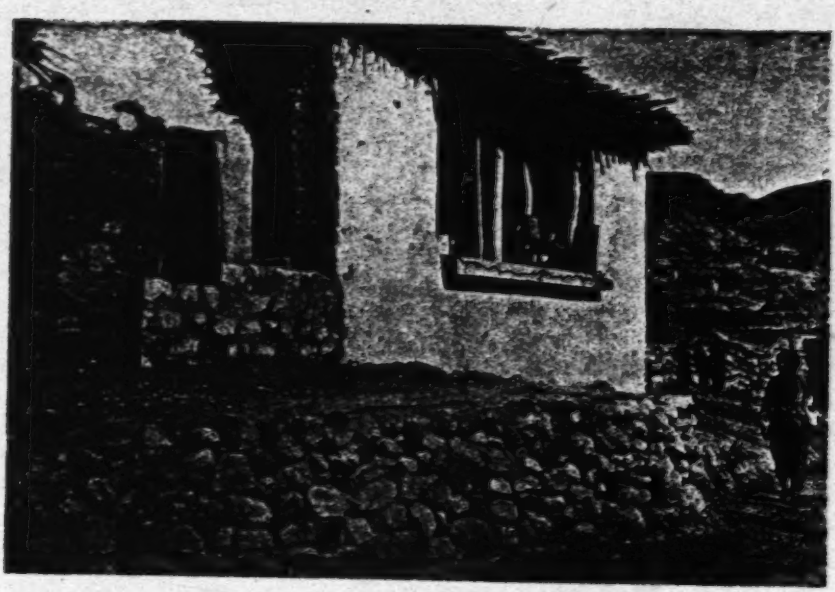

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Fig. 20. Loggia with columns made of slim, barked poplar trunks with pieces of wood inserted as capitals. Topzawa.

and the window frames sometimes come apart from the clay walls as the latter smoulder so much that large gaps appear. During dust storms doors and windows become more and more loose. 342

Two phenomena are typical of the Kurdish village houses of a certain size. The one is the central living room, sometimes placed on the first floor, the floor beneath being used as a stable. This central room, *ḥeywān*[11], looks like a huge niche in the body of the house for it lacks the fourth wall, thus becoming a cool, shady apartment during the hot part of the year[12]. The second phenomenon are the columns, often with pieces of wood inserted as capitals. The pillars are formed of slim, barked poplar trunks[13]. The three-walled room is possibly a Kurdish version of an Islamic architectural element, whereas the pillars can trace their ancestry back to Iranian-Achaemenedian architecture which is known as far east as Uzbekistan[14]. Cellars are unknown. The underground living room, *serdāb*[15], typical of Arab urban architecture, is not found in Kurdish buildings. [197]

The houses in the villages are built on hill slopes so that they often have two storeys to the front and only one at the back. As previously mentioned, they are usually built together and provide accomodation for several families. The way up to the flat roofs is nearly always by narrow ladders[16] made of thin poplar trunks with rungs of rounded sticks or pieces of a tree trunk. Inside stairs from the ground to the first floor are very rare in villages; where they do occur they are made of clay with